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October 17, 2003

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RECEIVED

OCT 17 2003

PUBLIC SERVICE
COMMISSION

Mr. Tom Dorman
Executive Director
Public Service Commission
211 Sower Boulevard
P. O. Box 615
Frankfort, Kentucky 40602-0615

RE: Case No: 2003-00228
Matrix Energy, LLC

Dear Mr. Dorman:

Please find enclosed for filing the original and ten (10) copies of the Answers of Matrix Energy, LLC to the Data Requests of Kentucky Power, Big Sandy RECC and Commission staff, which is being submitted in the above referenced case. Please return a file-stamped copy of each to our office.

Thank you for your attention to this matter and please feel free to call me if you have any questions concerning same.

Yours truly,


Robert C. Moore

Enclosures

RCM/dsg

RECEIVED

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

OCT 17 2003

PUBLIC SERVICE
COMMISSION

In the matter of:

MATRIX ENERGY, LLC)
FOR DETERMINATION OF)
RETAIL ELECTRIC SUPPLIER)

CASE NO. 2003-00228

**ANSWERS OF MATRIX ENERGY, LLC TO DOCUMENT REQUEST
OF BIG SANDY RURAL ELECTRIC COOPERATIVE
CORPORATION**

Comes Matrix Energy, LLC ("Matrix"), by counsel, and for its Answers to the document requests submitted by Big Sandy Rural Electric Cooperative Corporation to Matrix Energy, LLC, states as follows:

1. With reference to paragraph #3 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "Matrix" and "Czar" are affiliated companies with "Beech Fork". Please include ARTICLES OF INCORPORATION, BY-LAWS and minutes of Directors meeting from Jan. 2001 to date for each legal entity. Also include a copy of your job description.

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, copies of the Articles of Incorporation and Bylaws of Matrix, Czar and Beech Fork are provided at Tab 1. Further answering, Paul Horn does not have a written job description.

2. With reference to paragraph #4 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "Matrix is affiliated with Beech Fork"; "Matrix and Beech Fork are owned by the same individuals"; "Matrix is a contract mining company for Czar"; "I have been assigned to work on the Matrix project".

Answer: See Answer to Request No. 1. Further answering, the contract to mine executed by and between Matrix and Czar is provided at Tab 2.

3. With reference to paragraph #5 of “Testimony of Paul Horn”, please produce a copy of all written documents which relate to the statement that, “...Czar entered into a contract with Matrix to perform the actual mining operation. Beech Fork provides the engineering services to Matrix and Czar and its other affiliates. “

Answer: The contract to mine executed by and between Matrix and Czar is provided at Tab 2.

4. With reference to paragraph #6 of “Testimony of Paul Horn”, please produce a copy of all written documents which relate to the statement that, “...The Alma coal seam to be mined by Matrix is between 400 and 1,000 feet below ground surface. The mineable coal seam is between 30 and 54 inches thick, and contains approximately 50 millions tons of coal, in place. Czar already has the mining rights to mine all of these reserves, and Matrix, as the contract miner, has the right to mine them.”

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, relevant pages from a report prepared by Marshall Miller reflecting the depth and size of the Alma coal seam, the leases applicable to the Czar mine site and the contract to mine on the Czar mine site executed by and between Czar and Matrix are provided at Tabs 2 and 3.

5. With reference to paragraph #7 of “Testimony of Paul Horn”, please produce a copy of all written documents which relate to the statement that, “...Seventy-Five (75 %) of the total mineable coal reserves in the Alma coal seam to be mined by Matrix are located in the service

territory of AEP and Seventy-Six (76%) of the total permitted mineable coal reserves of the Alma coal seam are located in the service territory of AEP. Twenty-Five (25%) of the total mineable coal reserves in the Alma coal seam to be mined by Matrix are located in the service territory of Big Sandy and Twenty-Four (24%) of the total permitted mineable coal reserves of the Alma coal seam are located in the service territory of Big Sandy.

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, see the maps identified as Exhibit A & E, which reflects the location of the Alma coal seam and the documents at Tab 4.

6. With reference to paragraph #8 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "The boundary of the coal reserves was still being determined during the permitting process."

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, the first page of the report prepared by Marshall Miller concerning the Alma coal seam issued in August, 2002, and a letter dated November 15, 2001, forwarding the permit application form for the Matrix mine are provided at Tab 5.

7. With reference to paragraph #9 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...Matrix intends to mine all of the coal reserves at the Czar mine site and will obtain the necessary permit to do so. All of these reserves are considered to be part of the Matrix mine. The mine would not be economically feasible if

only the currently permitted reserves were to be mined.”

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, see the mine plan submitted as an attachment to the Application filed with the PSC in this matter at Tab 6.

8. With reference to paragraph #11 of “Testimony of Paul Horn”, please produce a copy of all written documents which relate to the statement that, “...The six coal seams that have been previously mined by other unrelated and related companies operating on what is now referred to as the Czar mine site are the 5 Block coal seam, the Clarion coal seam, the Stockton coal seam, the Coalburg coal seam, the Haddix coal seam and the Taylor coal seam. These coal seams were located at shallower depths than the Alma coal seam to be mined by Matrix. AEP provided the electric power for the mining of these coal seams.”

In addition, please provide “Power Distribution” maps for each coal seam.

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, relevant pages from a report prepared by Marshall Miller reflecting the coal seams on the Czar site are provided at Tab 3. See also the maps identified as Exhibits D and E, which reflect the coal seams previously mined on the Czar site, and the power distribution on the Czar site. Matrix does not have prior power distribution maps for the Czar site.

9. With reference to paragraph #11 of “Testimony of Paul Horn”, please produce a copy of all written documents which relate to the statement that, “Big Sandy stated in the meeting that its

capacity was full and that it did not have the capacity to service any new load in this area. This lack of capacity is evidenced by the letter dated September 6, 2001, forwarded by Big Sandy to AEP allowing AEP to provide temporary power during construction. See attached Exhibit C. A copy of the map that was shown to the Big Sandy representatives is attached as Exhibit B. Big Sandy's representatives indicated that it would take approximately one year for Big Sandy to provide electric service to the mine entrance and indicated that Beech Fork could get temporary power from the Czar mine site, which was being served by AEP, to start the development of the slope entrance and ventilation shaft to the mine, which would take approximately one year. Big Sandy indicated that it would have to determine if it would obtain power from the AEP transmission lines on the Czar mining site or from EKP's transmission line near the Thunder Ridge race track. The race track is approximately four miles from the mine site.

Answer: Matrix has no documents responsive to this request other than those referenced in the request, which have already been provided to Big Sandy.

10. With reference to paragraph #15 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...During the January 2002 meeting with representatives of Big Sandy and EKP, verbal authorization was given to representatives of Beech Fork to extend the AEP power line to the proposed mine entrance because of the one year delay in providing power and the lack of capacity of Big Sandy's current infrastructure. "...a letter from Big Sandy authorizing Beech Fork to obtain power from AEP to build the entrance to the Matrix mine. "...this letter confirms that Big Sandy did not have the ability to provide power to the Matrix mine site for construction purposes. "

Answer: Matrix has no documents responsive to this request other than those referenced in the request, which have already been provided to Big Sandy.

11. With reference to paragraph #16 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...The construction of the slope entrance by Matrix began on November 11, 2002. Air operated hand held drills were used to drill holes for the explosives and after detonation, air powered muckers were used to remove the debris. The air power was supplied by two electric 200 horse power air compressors. The 400 hundred horse power hoist used to remove the debris from the mine was placed in operation on November 21, 2002. The second shift of this operation was placed into operation on December 30, 2002. Thereafter, the operation continued for 20 hours a day, 7 days a week, with the exception of an approximately two week period due to equipment breakdowns. The construction of the ventilation shaft began in February of 2003. However, a diesel powered crane and diesel powered air compressors were used to dig the first 100 feet of the ventilation shaft. Thereafter, beginning on April 21, 2003, the same process that was used to dig the slope mine was also used to construct the ventilation shaft. Again, two electric 200 horse power air compressors were used to provide the air to the air tools. The 350 horse power hoist used to remove the debris from the ventilation shaft was placed in operation on May 2, 2003. The second shift of this operation was placed into operation on May 5, 2003. A 50 horse power fan was located at both the entrance to the slope mine and the ventilation shaft. Electric power was also provided to the small office trailers located at both the slope mine entrance and the entrance to the ventilation shaft..."

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, the invoices issued for the construction of the slope mine and shaft are provided at

Tab 7.

12. With reference to paragraph #17 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "one of the power lines to the Czar mine site was extended to the mouth of the Matrix mine. " Which one?

Answer: Objection. Matrix objects to this request on the basis that it is ambiguous and requires speculation as to its meaning. Without waiving this objection, see the map identified as Exhibit E, which reflects the extension of the power line from the Czar mining distribution system to the mouth of the Matrix mine.

13. With reference to paragraph #18 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...Matrix is concerned that it will experience approximately a ten percent (10 %) loss in power to the mouth of the mine due to the 1.6 mile length of the line to the mouth of the mine. This loss in power, in conjunction with the power loss as the electric lines are extended underground may endanger the electric motors used by Matrix in the mine. AEP has indicated that it will construct a substation adjacent to the 69 kv transmission line, supply 34.5 kv from this substation to a 12,470 volt substation built at the mouth of the mine. This will help to avoid the loss of power and the potential damage to the electric motors used by Matrix. AEP has also offered to allow Matrix the option of constructing the line from the 34.5 kv substation to a 12,470 volt substation at the mouth of the mine, as well as building these two substations."

Answer: Assuming that Big Sandy would be running 13,200 volts 1.6 miles, the estimated 10 percent loss in power over the distribution line is based upon the 24 years experience of Ted McGinnis, Vice President of Matrix, operating mines from various power sources, as well as the information contained in Information Circular 9258 Titled Mine Power Systems published by the

United States Department of the Interior, and the specifications from Reliance Electric and Joy which are provided at Tab 8.

14. With reference to paragraph #19 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...The coal preparation plant for the Matrix coal mine is located on the Czar mining site and the power to the coal preparation plant is provided by AEP. The coal will initially be transported from the coal stockpile area by truck, and after approximately one-half to one year, a series of three (3) connected conveyor belts, with a total length of approximately 13,050 feet, will be used to transport the coal to the Czar preparation plant. Of these three (3) connected belts, only the first belt will be supplied with power by a motor located in Big Sandy's territory. The remaining two belts will be supplied with power from motors located in AEP's territory. These two belts are approximately 11,734 feet long."

Answer: See the map identified as Exhibit A.

15. With reference to paragraph #20 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...All of the equipment operated by Matrix in the mine will have to be electric powered. Matrix will operate continuous miners (995 volts), shuttle cars (480 volts), roof bolters (480 volts), feeders (480 volts), belt drive (480 volts), and a scoop, battery operated, which is charged by 480 volts. The primary cause of damage to this equipment is reductions or surges in electric power. The need to provide consistent reliable power to the mine is the reason that Matrix needs the 12,470 volt substation to be built at the mouth of the mine."

Answer: See answer to Request No. 13.

16. With reference to paragraph #21 of "Testimony of Paul Horn", please produce a copy of

all written documents which relate to the statement that, "...Matrix estimates that it will require approximately 3,000 kw to be supplied to the Matrix mine per month." The calculations are as follows:

Big Sandy's charge:

Demand cost:	$\$5.39 \times 3,000 \text{ kw} = \$16,170.00$
Energy Charge:	$1,275.00 \text{ kwh} \times \$0.0277 = \$35,317.50$
Fuel Cost Adjustment:	$1,275.00 \text{ kwh} \times \$0.00627 = \$7,994.25$
Service Charge	\$150.00

Total cost per month: \$59,631.75

AEP's charge:

Demand cost:	$\$8.51 \times 3,000 \text{ kw} = \$25,530.00$
Energy Charge	$1,203,120 \text{ kwh} \times 0.01171 = \$14,088.53$ (No minimum kwh in tariff)
Fuel cost	\$488.59
Environmental Adjustment	\$902.67
Service charge	\$662.00

Total cost per month \$41,671.79

This calculation assumes that Big Sandy will only serve two sections of the Matrix mine, which will be completed within seven (7) years, and AEP will serve the remaining two sections of the Matrix mine through the boreholes. If the entire project is served by Big Sandy, the cost would be based on four (4) sections, and Big Sandy's cost would be approximately six million (\$6,000,000.00) more than AEP's cost over the life of the Matrix mine..."

Answer: Objection. Matrix objects to this request on the basis that it is ambiguous and requires speculation as to its meaning. Without waiving this objection, the rates of Big Sandy, which were downloaded from the Public Service Commission, are provided at Tab 9. Because Big Sandy's rates set forth on the Public Service Commission Web Site have changed, revised calculations based on the current information at said web site are provided at Tab 9.

17. With reference to paragraph #22 of "Testimony of Paul Horn", please produce a copy of

all written documents which relate to the statement that, "...Matrix plans to install three boreholes into the Matrix mine. All three boreholes will be in territory served by AEP, and will be used to allow power lines to be fed down to the mine to provide power to the equipment operating at large distances from the mine entrance. This will eliminate the power loss that would otherwise occur. Since these boreholes are in AEP's territory, AEP will provide the power to the electric line in each of the boreholes."

Answer: Objection. Matrix objects to this document request on the basis that it is overbroad, unduly burdensome and requests information that is not relevant or which is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, see the maps identified as Exhibit A & E, which set forth the location of the three (3) boreholes.

18. With reference to paragraph #23 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...By having AEP provide power to the mine, if there is a blackout or brownout condition, Matrix will know to contact only one electric company to discover the reason for the blackout or brownout condition and will not have to wait for Big Sandy to contact EKP, and then for EKP to contact AEP to inform it of the problem, determine the cause of the problem and to solve the problem. Furthermore, a single service provider is an important safety factor because when power to the mine fails, there is never any doubt about whether certain equipment is energized. This is a very serious concern because part of the mine could be energized and part of the mine not be energized, thus, someone may mistakenly think the entire mine is without electricity and come into contact with an energized line."

Answer: Matrix has no documents responsive to this request.

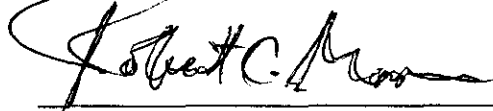
19. With reference to paragraph #24 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...If AEP is allowed to serve the Matrix mine, a 34.5 kv line will be run from the substation adjacent to the 69 kv transmission line to the entrance of the mine. As the mine is developed, the electric lines for the three boreholes, which are located in AEP territory, could be run off of the AEP 34.5 kv line. However, if Big Sandy provides 34.5 kv service to the mine entrance through EKP, this 34.5 kv line would not be allowed to be run to the three boreholes in AEP's territory. Therefore, an additional substation adjacent to the 69 kv transmission line or the 138 kv transmission line would have to be installed and a power line run from this new substation to the three boreholes. Furthermore, if Big Sandy provides service to the mine, then Big Sandy, EKP and AEP would be involved instead of just AEP."

Answer: See the map identified as Exhibit E.

20. With reference to paragraph #25 of "Testimony of Paul Horn", please produce a copy of all written documents which relate to the statement that, "...AEP indicated that the service to the mine entrance could be provided in approximately six (6) months."

Answer: Matrix has no documents responsive to this request. The representatives of AEP made this statement at the informal conference held in this matter.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert C. Moore", written over a horizontal line.

Robert C. Moore
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Frankfort, KY 40602-0676
Telephone: (502) 227-2271

COUNSEL FOR MATRIX ENERGY, LLC

CERTIFICATE OF SERVICE

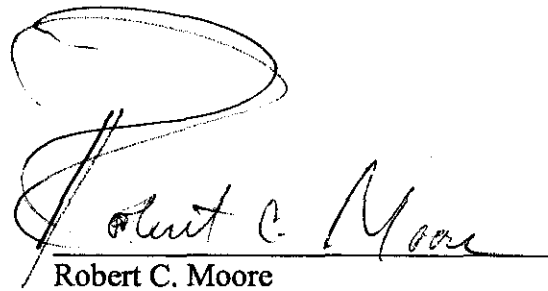
I hereby certify that a copy of the foregoing Answer was served by United States First Class Mail, postage prepaid, on this 17th day of October, 2003 upon:

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Robert C. Moore